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IS 6225 (1971): Ship's Oval Eye Plates [TED 17: Shipbuilding]



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Bhartrhari—Nitiśatakam

“Knowledge is such a treasure which cannot be stolen”

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IS : 6225 - 1971

Indian Standard

**SPECIFICATION FOR
SHIP'S OVAL EYE PLATES**

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INDIAN STANDARDS INSTITUTION
MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG
NEW DELHI 1

November 1971

**AMENDMENT NO. 1 JANUARY 1992
TO
IS 6225 : 1971 SPECIFICATION FOR SHIP'S OVAL EYE
PLATES**

[*Page 4, clause 3.1(a) and (b)*] — Substitute the following for the existing matter:

- “ a) Carbon steel forgings conforming to IS 3261 : 1980 ‘Specification for carbon steel forgings for shipbuilding industry (*first revision*)’
 - b) Structural steel conforming to IS 3039 : 1980 ‘Specification for structural steels for construction of hulls of ships (*first revision*)’.”
- (*Page 4, foot-notes marked with ‘*’ and ‘†’ symbols*) — Delete.

(TED 17)

Reprography Unit, BIS, New Delhi, India

Indian Standard

SPECIFICATION FOR SHIP'S OVAL EYE PLATES

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Indian Standard

SPECIFICATION FOR SHIP'S OVAL EYE PLATES

0. FOREWORD

0.1 This Indian Standard was adopted by the Indian Standards Institution on 23 August 1971, after the draft finalized by the Shipbuilding Sectional Committee had been approved by the Marine, Cargo Movement and Packaging Division Council.

0.2 Eye plates are provided on the topmost deck and at other decks as required, to secure guy ropes from masts, derrick posts, etc.

0.3 Eye plates are provided with the sole plates to strengthen and increase the contact area and are either directly riveted to deck or welded to the deck.

0.4 In the preparation of this standard, assistance has been derived from DIN 82025 'Oval eye plates', issued by Deutscher Normenausschuss.

0.5 For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with IS : 2-1960*. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

1. SCOPE

1.1 This standard specifies the material and dimensions for ship's oval eye plates.

2. TERMINOLOGY

2.0 For the purpose of this standard, the following definition shall apply.

2.1 Safe Working Load — The safe working load of the eye plate is the maximum tensile load likely to occur in the guy ropes attached to it. If

*Rules for rounding off numerical values (*revised*).

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more than one rope is secured to the eye plate, the sum of the maximum tensile load on each of the rope, is the safe working load of the oval eye plate.

3. MATERIAL

3.1 Ship's oval eye plates shall be made from any of the following material:

- a) Carbon steel forgings conforming to IS : 3261-1966*.
- b) Structural steel conforming to IS : 3039-1965†.

4. TYPES

4.1 Oval eye plates shall be of two types, namely, Type A and Type B, as shown in Table 1.

4.2 Type A eye plates are suitable for attachment to decks, bulworks, etc. Type B eye plates are suitable for attachment to derricks.

5. SHAPE AND DIMENSIONS

5.1 The shape and dimensions of the ship's oval eye plates together with sole plate shall be as given in Table 1.

6. TOLERANCES

6.1 The tolerances on other dimensions shall be of coarse series according to IS : 2102-1969‡.

7. MARKING

7.1 Each oval eye plate shall be marked legibly and indelibly with the manufacturers identification mark, and the safe working load.

7.1.1 Oval eye plates may also be marked with the ISI Certification Mark.

NOTE — The use of the ISI Certification Mark is governed by the provisions of the Indian Standards Institution (Certification Marks) Act, and the Rules and Regulations made thereunder. Presence of this mark on products covered by an Indian Standard conveys the assurance that they have been produced to comply with the requirements of that standard, under a well-defined system of inspection, testing and quality control during production. This system, which is devised and supervised by ISI and operated by the producer, has the further safeguard that the products as actually marketed are continuously checked by ISI for conformity to the standard. Details of conditions, under which a licence for the use of the ISI Certification Mark may be granted to manufacturers or processors, may be obtained from the Indian Standards Institution.

*Specification for carbon steel forgings for shipbuilding industry.

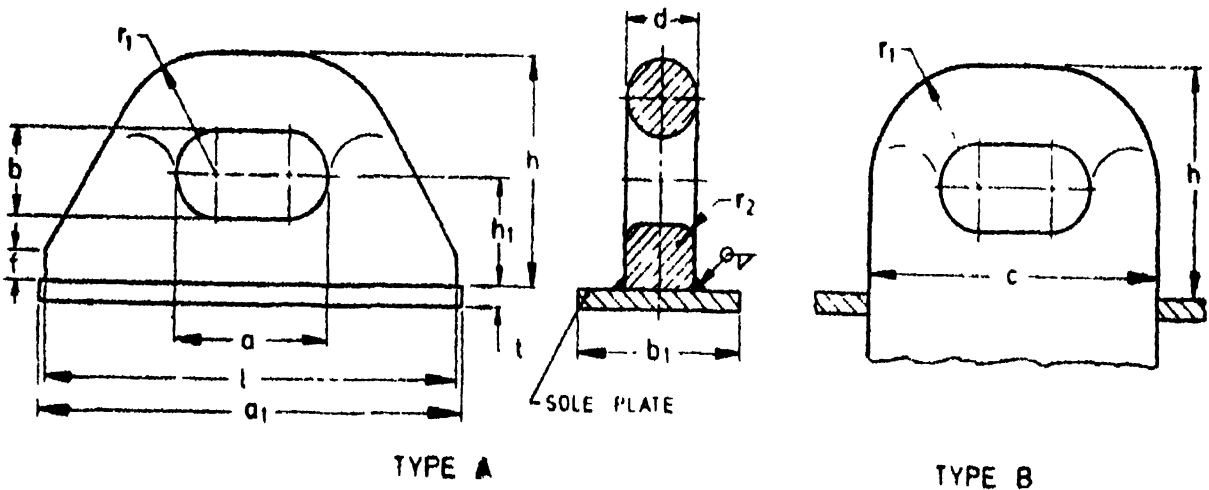
†Specification for structural steel (shipbuilding quality).

‡Allowable deviations for dimensions without specified tolerances (*first revision*).

TABLE 1 DIMENSIONS OF OVAL EYE PLATES TOGETHER WITH SOLE PLATE

(Clauses 4.1 and 5.1)

All dimensions in millimetres.



SAFE WORKING LOAD IN TONNES	a	b	c	d	f	h	h ₁	l	r ₁	r ₂ APP- ROX	SOLE PLATE			THROAT THICK- NESS OF WELD
											a ₁	b ₁	t	
1.0	35	22	67	16	8	52.0	25	95	27.0	5	100	40	6	4
1.6	42	24	82	20	8	65.0	33	120	32.0	5	125	45	6	4
2.0	50	27	100	25	12	73.5	35	132	38.5	5	140	55	6	6
2.5	55	30	105	25	12	79.0	39	140	40.0	6	145	55	8	6
3.2	66	34	126	30	12	89.0	42	180	47.0	7	185	70	8	6
4.0	77	38	147	35	15	102.0	48	210	54.0	7	220	80	10	7
5.0	87	40	157	40	18	117.0	57	225	60.0	8	235	90	10	9
6.3	91	44	171	40	18	128.0	66	240	62.0	8	250	90	10	9
8.0	101	50	201	50	20	148.0	73	270	75.0	10	280	115	12	10
10.0	117	57	217	50	22	158.5	80	300	78.5	10	310	115	14	11
12.5	128	63	248	60	24	178.5	87	335	91.5	12	345	140	16	12
16.0	145	69	265	60	26	189.5	95	370	94.5	12	385	140	18	13
20.0	157	73	297	70	28	211.5	105	420	106.5	14	435	160	20	14
25.0	170	85	330	80	32	242.5	120	470	122.5	16	490	180	22	16
32.0	194	91	374	90	36	265.5	130	530	135.5	18	550	210	25	18
40.0	220	99	420	100	40	294.5	145	570	149.5	20	590	230	28	20
50.0	240	107	460	110	45	318.5	155	630	163.5	22	655	250	32	22

INDIAN STANDARDS

ON

Ship's Deck Fittings

IS:	Rs
3271-1966 General requirements for steel cowl ventilators with detachable components	1.50
3272-1966 Dimensions for oval-head steel cowl ventilators	2.50
3273-1966 Dimensions for circular-head steel cowl ventilators	1.00
3274-1966 Goose-neck ventilators — welded type	2.50
3275-1966 Dimensions for steel cowl ventilators accessories	2.00
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3280-1966 Dimensions for mushroom ventilators with adjustable head-welded type	1.50
3281-1966 Dimensions for mushroom ventilators with fixed head — welded type ...	1.00
3282-1966 Dimensions for mushroom ventilators with adjustable head-cast iron type	2.00
3283-1966 Dimensions for mushroom ventilators with adjustable head-cast iron type with provision for passage of light	1.50
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5628-1970 Cast deck-end rollers	2.50
5875-1970 Open deck scuppers	2.50
5876-1970 Hopper scuppers	2.00
*6176-1971 Steel ladders for ship's use (<i>under print</i>)	—
*6203-1971 Ship's round eye plates (<i>under print</i>)	—

*Under print

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Fire safety
Inland vessels
Life saving equipment & accessories
Magnetic compass
Mooring equipment
Navigational lights
Piping systems, valves and accessories
Ship's derricks and accessories
Ship's side scuttles & windows

Ventilation
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